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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,101	01/21/2000	Ali O. Gure	L0461/7073(JRV)	5361
7590 12/10/2003		EXAMINER		
John R Van Amsterdam			GOLDBERG, JEANINE ANNE	
Wolf Greenfield & Sacks PC 600 Atlantic Avenue			ART UNIT	PAPER NUMBER
Boston, MA 02210			1634	
			DATE MAILED: 12/10/2003	3

Please find below and/or attached an Office communication concerning this application or proceeding.



## **Advisory Action**

Application No.	Applicant(s)	
09/489,101	GURE ET AL.	
Examiner	Art Unit	
Jeanine A Goldberg	1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 17 November 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

Examination (RCE) in compliance with 37 CFR 1.114.	(o) a timoly med residuest for continued
PERIOD FOR REPLY [check either a)	or b)]
a) $\square$ The period for reply expires $6$ months from the mailing date of the final rejection.	
b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the no event, however, will the statutory period for reply expire later than SIX MONTHS fr ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MO 706.07(f).	om the mailing date of the final rejection.
Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition fee have been filed is the date for purposes of determining the period of extension and the correstee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory pet (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).	sponding amount of the fee. The appropriate extension eriod for reply originally set in the final Office action; or
1. A Notice of Appeal was filed on <u>17 November 2003</u> . Appellant's Brief mu 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid 6	
2. The proposed amendment(s) will not be entered because:	
(a)   they raise new issues that would require further consideration and/	or search (see NOTE below);
<ul><li>(b) ☐ they raise the issue of new matter (see Note below);</li></ul>	
(c) ☐ they are not deemed to place the application in better form for appears issues for appears; and/or	eal by materially reducing or simplifying the
(d) they present additional claims without canceling a corresponding n	number of finally rejected claims.
NOTE:	
3. Applicant's reply has overcome the following rejection(s):	
4. Newly proposed or amended claim(s) would be allowable if subm canceling the non-allowable claim(s).	itted in a separate, timely filed amendment
5. ☑ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has application in condition for allowance because: <u>See Continuation Sheet</u> .	been considered but does NOT place the
6. The affidavit or exhibit will NOT be considered because it is not directed raised by the Examiner in the final rejection.	SOLELY to issues which were newly
7. For purposes of Appeal, the proposed amendment(s) a) will not be er explanation of how the new or amended claims would be rejected is pro-	
The status of the claim(s) is (or will be) as follows:	
Claim(s) allowed: <u>NONE</u> .	
Claim(s) objected to: <u>NONE</u> .	
Claim(s) rejected: <u>1,2,121,123,125,126,128,130-132,134 and 135</u> .	
Claim(s) withdrawn from consideration: NONE.	
8. The drawing correction filed on is a) approved or b) disapproved or b)	proved by the Examiner.
9. Note the attached Information Disclosure Statement(s)( PTO-1449) Pap	per No(s)
10. Other:	GARY BENZION, PH.D SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 1600
	How turns
S. Patent and Trademark Office	

U.S. Patent and Trademark Office PTOL-303 (Rev. 11-03)

**Advisory Action** 

Part of Paper No. 1203

Continuation of 5, does NOT place the application in condition for allowance because:

The claims have been amended to incorporate the limitations of dependant claims into the independent claim.

The response asserts that the SOX2 gene excludes brain, testis, prostate, small intestine and colon tissue (response filed November 17, 2003). The response further asserts that small cell lung cancer cell lines contain cell lines which were isolated from tissues other than primary lung cancer. However, based upon the specification, "SOX2 was expressed in 5/10 SCLC cell lines." The specification lists the cell lines. None of the cell lines in the table on page 6 of the response are among the cell lines listed in the list of cell lines which express SOX2. Therefore, it is unclear and unpredictable that SOX2 is expressed in tissues other than lung, as asserted by the instant response.

With respect to the 112/1st para rejetion, ZINC2 gene expression was analyzed (Example 3, page 56). The response states that screening for the presence of the claimed sequences is typical and routine in clinical labratories (page 7 of response filed November 17, 2003). This argument has been thoroughly reviewed, but is not found persusasive because while it is acknowledged that determining expression levels is typical and routine, the outcome of such experiments is unpredictable and undue. Claim 132, for example, is drawn t detecting breast, colon, head & neck cancers, but there is no indication that the products are not expressed in these tissues. It is unpredictable whether the ZINC2 is expressed in each of these tissues since there is no indication in the specification. Further since ZINC2 is expressed in some normal tissues, it is unpredictable whether the ZINC2 is expressed in any other of the claimed tissues. The response states that the issue of threshold is meaningless, because any detectable expression would be sufficient to be diagnostic of cancer. This argument has been thoroughly reviewed, but is not found persusasive because if the normal tissues also express the ZINC2 mRNA, without overexpression or underexpression at a significant leve, the skilled artisan would be unable to diagnose the particular cancers. Thus, while the specificaiton teaches the presence of ZINC2 in the claimed cancers, it is unpreditable whether they were also expressed in normal tissue. Therefore, the claims still require further undue experimentation to practice the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Goldberg whose telephone number is (703) 306-5817. The examiner can normally be reached Monday-Friday from 6:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax number for this Group is (703) 305-3014.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

Jeanine Goldberg
Patent Examiner
December 8, 2003